Applicant

: Dudley Finch et al

App. No.

10/577,962

Page No.

: 2

CLAIMS

- 1. (Original) A slowly implantable electrode.
- 2. (Original) The electrode according to claim 1, wherein said electrode comprises a MEMS electrode.
- 3. (Original) The electrode according to claim 1, wherein said electrode comprises a shape-memory polymer coated electrode.
- 4. (Original) The electrode according to claim 3, wherein said polymer is bioresorbable.
- 5. (Original) The electrode according to claim 3, wherein said electrode further includes an antiglutamate coating on an exterior surface of said electrode.
- 6. (Original) The electrode according to claim 1, wherein said electrode further includes an immunosuppressant coating on an exterior surface of said electrode.
- 7. (Original) The electrode according to claim 1, wherein said electrode is coated by a bioresorbable coating.
- 8. (Original) The electrode according to claim 1, wherein said electrode is surface engineered.
- 9. (Withdrawn) A coating for an electrode, said coating comprising a shape-memory polymer.
- 10. (Withdrawn) The coating according to claim 9, wherein said polymer is bioresorbable.

Applicant

: Dudley Finch et al

App. No.

: 10/577,962

Page No.

: 3

11. (Withdrawn) The coating according to claim 9, wherein said coating further includes an antiglutamate coating on an exterior surface of said electrode.

- 12. (Withdrawn) The coating according to claim 9, wherein said coating further includes an immunosuppressant coating on an exterior surface of the electrode.
- 13. (Withdrawn) The coating according to claim 9, wherein said coating is surface engineered.
- 14. (Original) A method for inserting an electrode into tissue by inserting the electrode of claim linto brain tissue.
- 15. (Original) The method according to claim 14, wherein said inserting step includes- inserting the electrode into tissue and slowly resorbing the coating into the brain.
- 16. (Original) The method according to claim 14, wherein said inserting step includes slowly inserting the electrode.
- 17. (Original) The method according to claim 14, further including surface engineering the electrode.
- 18. (Original) A method of minimizing trauma and astrocytic scarring by inserting the electrode of claim 1 into body tissue.
- 19. (Original) The method according to claim 18, wherein said inserting step includes inserting the electrode into body tissue and slowly resorbing the coating into the tissue.
- 20. (Original) The method according to claim 18, wherein said inserting step includes slowly inserting the electrode.

Applicant

: Dudley Finch et al

App. No.

: 10/577,962

Page No.

: 4

- 21. (Original) A slowly implantable electrode formed using MEMS technology.
- 22. (Original) A slowly implantable electrode formed by coating an electrode with shape-memory polymers.
- 23. (Withdrawn) A coating for an electrode, said coating comprising a bioresorbable coating.
- 24. (Original) A slowly implantable electrode formed by coating an electrode with a bioresorbable coating.
- 25. (Original) An electrode for limiting micromovement in vivo, said electrode comprising an electrode and a bioresorbable coating on the exterior surface of said electrode.
- 26. (Withdrawn) A coating for limiting micromovement, said coating comprising a bioresorbable coating for placement on the exterior surface of an electrode or array backing.
- 27. (Previously Presented) A method of forming a slowly implantable electrode using a formation method capable of forming ultra-fine electrodes.
- 28. (Previously Presented) The method according to claim 27, wherein said using step includes using a method selected from the group consisting essentially of two-photon stereo lithography, micro-molding, MEMS, and ESA.
- 29. (Previously Presented) A slowly implantable electrode formed according to the method of claim 27.